August 17, 2005

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of:	)	
Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service	)	MM Docket No. 99-325

To: Office of the Secretary
FILED ELECTRONICALLY

REPLY COMMENTS OF WMVY ON NATIONAL RADIO SYSTEMS COMMITTEE'S "IN-BAND/ON-CHANNEL DIGITAL RADIO BROADCASTING STANDARD NRSC-5"

Aritaur Communications, Inc. (herein "Aritaur" or "WMVY"), files these reply comments pursuant to the Commission's Public Notice, DA 05-1661, released June 16, 2005, which established deadlines for public comments on the National Radio Systems Committee ("NRSC") initial digital broadcasting ("DAB") standard entitled "In-band/On-channel Digital Radio Broadcasting Standard NRSC-5" ("NRSC-5").

Aritaur is the licensee of FM Station WMVY, which is licensed to serve Tisbury, Massachusetts, a community on the island of Martha's Vineyard, off the coast of Massachusetts. WMVY is heard on several licensed FM translators in the region. People worldwide can, and do, receive WMVY programming via several different internet audio streaming services, employing several different audio coding technologies (coder-decoders or "codecs"). The matter of the missing codec in the NRSC-5 standard has been discussed by a number of

commenters in this proceeding. **In these reply comments, WMVY supports those who seek a complete NRSC standard, including full disclosure of the codec.**

On July 18, 2005, Microsoft Corporation, Broadcast Signal Lab, LLP, and Impulse Radio filed joint Comments to request that the Commission seek further specification from NRSC before the Commission would adopt the NRSC-5 standard. (On July 28, 2005, the parties filed an Erratum to correct an error concerning tests made by National Public Radio ("NPR"), to indicate that the NPR tests were conducted using the HD Radio codec.)

IBiquity Digital Corporation ("IBiquity") stated in its comments, "where systems are "open" or non-subscription, as is the case with AM and FM radio, standards are required to ensure system compatibility." Indeed, the codec to be utilized by all who receive the main channel program should be one codec, "to ensure compatibility."

WMVY urges the Commission to realize that it would do the public great harm to have one broadcasting clique transmitting the digital version of its analog signal with one codec, while another clique decides to transmit with a second codec. On-line listeners can download the desired decoder for a particular service. The economics of radio receiver appliances do not rely on the ready availability of a computer and an internet connection to swap codecs.

With competition for the main channel codec on IBOC radios, receiver manufacturers would have to decide in advance which codec(s) to employ, and consumers would lose the ubiquity that is the broadcast medium today—an ubiquity in which all analog AM-FM radios today can decode the main program of any AM or FM signal that they can receive.

While parties on both sides of the IBOC debate have employed the AM stereo debacle as a means to illustrate points pro or con, one fundamental characteristic differs between AM stereo and an unregulated IBOC codec—AM stereo is merely an enhancement to plain old

monophonic reception, while IBOC transmission has the potential to become the only way listeners may receive radio broadcasts in the future. Hence, just as it was necessary to specify parameters for AM bandwidth and modulation and FM deviation and pre-emphasis in the analog world, "to ensure system compatibility," it is necessary to adopt a single codec for the main program channel, which duplicates the host analog channel.

As Jonathan E. Hardis points out in his very compelling treatment on the subject, the industry is hoping to rely upon "network effects" to insure supremacy of the only codec presently on the IBOC market. Recall that his discussion of network effects related to the principle that "the more subscribers one system attracts, the more likely it is to attract additional subscribers in the future." It is this expectation, that the HDC codec is a market shoo-in, that gives the industry some solace in not succeeding in obtaining a disclosed NRSC-5 codec.

Even the Consumer Electronics Association ("CEA") laments the lack of a disclosed codec in the standard, saying "While CEA would prefer that a codec be included in the specification, we note that the NRSC made its best effort toward this end and, ultimately, concluded that NRSC-5 is an appropriate standard even without a codec." WMVY agrees that NRSC-5 is an appropriate standard, *as far as it goes,* but it may not be sufficient from a regulatory standpoint. CEA made it clear that NRSC was in a predicament, "because IBiquity Digital Corporation did not want to disclose the details of its HDC codec…"

Digital Radio Mondiale ("DRM") suggests that this issue is "posing a great responsibility on the FCC," with which WMVY agrees. DRM emphasizes, "…in short, NRSC-5 does not describe the audio codec…to a degree of detail that should be presented in a standard."

Clearly, the lack of disclosure of the codec is an important issue that the NRSC was forced to sidestep in response to the intransigence of IBiquity. CEA, among others,

heroically suggests the industry can live without disclosure, presumably basing their opinions on faith in network effects.

Network effects might address the concerns of industry players who must license iBiquity technology and who wish to see their products and services get a boost from adoption of anything that resembles a complete standard. However, *de facto* adoption of the HDC codec without disclosure runs afoul of principles of good governance, as so eloquently articulated by Mr. Hardis. Neither NRSC nor its members are in the business of governance. They convened in an attempt to prepare a complete technical standard.

This proceeding is an opportunity for the Commission to stand in the bully pulpit and set expectations for full disclosure of this technology that would be the universal free over-the-air radio broadcast medium of the future. Clearly, the NRSC would be capable of acting on such disclosure, were it forthcoming.

Radio World, a broadcast industry periodical, in its August 17, 2005 issue, stated, "A big point of contention leading up to the spring vote on NRSC-5 was whether to include a codec specification. As *Radio World* has reported, many members wanted to include details about IBiquity's HDC codec in the voluntary standard. IBiquity has said that due to contractual agreements, it could not release specifics. In order to have a standard at all, members of the DAB Subcommittee decided to proceed with NRSC-5 without the codec specifics."

All parties seek rapid adoption of regulatory guidance on the technology, and a requirement from the Commission that the codec be properly disclosed should not create undue delay. The claim that contractual obligations preclude iBiquity from revealing the codec, if accurate, is a red herring. Given the importance of regulatory support of the technology, pressure from the people of the United States, through this Commission, should open the doors

of secrecy, notwithstanding any contractual terms between private parties who stand to benefit from IBOC adoption. Even CEA, a trade organization of which iBiquity is a member and on whose board iBiquity has representation, suggests that it is iBiquity's unwillingness, not its inability, that has kept the codec from seeing the light of day.

Once the codec is disclosed, it can be officially and honestly adopted as the single codec for replicating the main channel analog program. Market certainty will be established for the millions of IBOC listeners who will come to the table in the coming years; no question will exist on the singularity and availability of the main channel codec.

Supplemental programming is possible in the NRSC-5 standard. This should be permitted without additional regulatory burdens. Although supplemental program services are different than subcarrier services in that they would be available on full-production consumer radios, they are one evolutionary step removed from subcarrier services. Just as analog subcarriers have evolved today to serve niche audiences, so too, supplementary programming can be offered to attract specialized audiences and to broaden the fare available on free over-the-air radio stations. Because of the lack of analog backup and fast-access capability, supplemental program services are not equal in value or importance to the main channel.

The Commission has always encouraged innovation in the provision of new broadcast services on the FM band without encumbering regulatory hurdles, and supplemental program services are a continuation of this legacy. Because IBOC is a digital medium, more people will be able to benefit from low price receivers carrying new services and features offered by these radio stations.

Supplemental channels should be able to have different codecs than HDC. This is a place where innovation and competition should be encouraged. The main channel should

remain sacrosanct with its (disclosed) single-codec standard, but supplemental channels, like audio streams on the internet, could benefit from competition in codec quality and capability.

With the true standardization of a main channel codec also should come standardization of the codec identification scheme indicated by Microsoft Corporation *et al*. NRSC is presently working with iBiquity on standardizing codec identification, with a positive result not yet guaranteed.

Microsoft, Broadcast Signal Lab, LLP, and Impulse Radio have also addressed concerns about the absence of a data transmission standard, which DRM suggests can be handled by the FCC in a subsequent order after NRSC completes its work on the initial standard. If the Commission provisionally adopts, or delays adoption of, NRSC-5 pending resolution of the codec issue, the effort should include resolution of the data transmission issue as a parallel requirement.

IBOC technology has promise and has come a long way. As a small-market radio station, WMVY watches developments with interest. The outcome of this process will probably determine if and when WMVY elects to convert to IBOC. A final push to complete the standard is all that is necessary. For a standard that is complete from a regulatory standpoint, the industry needs a little help from the firm hand of the Commission. We respectfully support those who hope the Commission will insist on a complete standard.

Respectfully submitted,

Aritaur Communications, Inc.

By: */s/ Joseph V. Gallagher*

Joseph V. Gallagher, President

27 Chastellux Avenue

Newport, RI 02840

Telephone: 401-841-9484

August 17, 2005